

L Number	Hits	Search Text	DB	Time stamp
1	457	(544/279).CCLS.	USPAT; US-PGPUB	2003/09/23 09:09
2	171	(514/264.1).CCLS.	USPAT; US-PGPUB	2003/09/23 09:09
3	486	("MMP-13" OR "MMP13" OR "collagenase-3" OR (collagenase ADJ "3"))	USPAT; US-PGPUB	2003/09/23 09:11
4	52	"pyrido[3,4-d]pyrimidine" "pyrido[3,4-d]" "pyrido(3,4-d)pyrimidine" "pyrido(3,4-d)"	USPAT; US-PGPUB	2003/09/23 09:13
6	3	((544/279).CCLS.) ((514/264.1).CCLS.) AND (("MMP-13" OR "MMP13" OR "collagenase-3" OR (collagenase ADJ "3")))	USPAT; US-PGPUB	2003/09/23 09:15
5	30	((544/279).CCLS.) ((514/264.1).CCLS.) AND ("pyrido[3,4-d]pyrimidine" "pyrido[3,4-d]" "pyrido(3,4-d)pyrimidine" "pyrido(3,4-d)" "[3,4-d]" "(3,4-d)")	USPAT; US-PGPUB	2003/09/23 09:16

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal611txm

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	Jul 15	Data from 1960-1976 added to RDISCLOSURE
NEWS	5	Jul 21	Identification of STN records implemented
NEWS	6	Jul 21	Polymer class term count added to REGISTRY
NEWS	7	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS	8	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	9	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	10	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	11	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS	12	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS	13	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS	14	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	15	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	16	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS	17	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS	18	SEP 22	DIPPR file reloaded
NEWS EXPRESS			April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation

of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:36:22 ON 23 SEP 2003

=> file reg

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 09:36:33 ON 23 SEP 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6

DICTIONARY FILE UPDATES: 22 SEP 2003 HIGHEST RN 591204-55-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

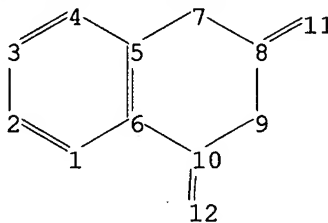
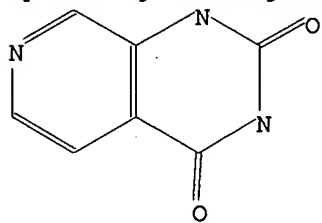
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

Uploading C:\Program Files\Stnexp\Queries\10075069.str



chain nodes :

11 12

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

8-11 10-12

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10

exact/norm bonds :

5-7 6-10 7-8 8-9 8-11 9-10 10-12

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

10/075,069

Thomas McKenzie

isolated ring systems :  
containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:CLASS 12:CLASS

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 09:36:50 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 140 TO ITERATE

100.0% PROCESSED 140 ITERATIONS  
SEARCH TIME: 00.00.01

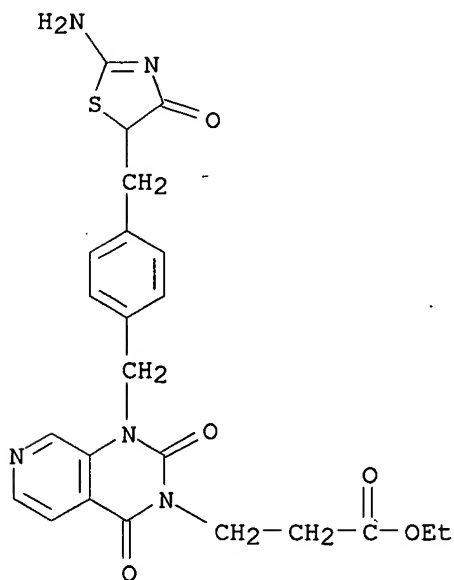
2 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 2091 TO 3509  
PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> d scan

L2 2 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN  
IN Pyrido[3,4-d]pyrimidine-3(2H)-propanoic acid, 1-[[4-[(2-amino-4,5-dihydro-4-oxo-5-thiazolyl)methyl]phenyl]methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI)  
MF C23 H23 N5 O5 S



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s Pyrido[3,4-d]pyrimidin-2,4-dione

162917 PYRIDO

54773 3,4-D

440786 PYRIMIDIN

1025977 2,4

713346 DIONE

L3 0 PYRIDO[3,4-D]PYRIMIDIN-2,4-DIONE

(PYRIDO(W) 3,4-D(W) PYRIMIDIN(W) 2,4(W) DIONE)

=> s Pyrido[3,4-d]pyrimidin-2,4-dione/cn

L4 0 PYRIDO[3,4-D]PYRIMIDIN-2,4-DIONE/CN

=> s Pyrido[3,4-d]pyrimidin-2,4-dione/cns

146902 PYRIDO/CNS

54773 3,4-D/CNS

146687 PYRIMIDIN/CNS

1025982 2,4/CNS

400174 DIONE/CNS

L5 0 PYRIDO[3,4-D]PYRIMIDIN-2,4-DIONE/CNS

((PYRIDO(W) 3,4-D(W) PYRIMIDIN(W) 2,4(W) DIONE)/CNS)

=> s c7h5n3/mf

L6 85 C7H5N3/MF

=> s Pyrido[3,4-d]pyrimidin?/cns and l6

146902 PYRIDO/CNS

54773 3,4-D/CNS

746904 PYRIMIDIN?/CNS

1176 PYRIDO[3,4-D]PYRIMIDIN?/CNS

((PYRIDO(W) 3,4-D(W) PYRIMIDIN?)/CNS)

L7 1 PYRIDO[3,4-D]PYRIMIDIN?/CNS AND L6

=> d cn str rsd

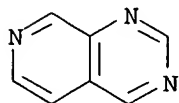
L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

CN **Pyrido[3,4-d]pyrimidine (7CI, 8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN 1,3,7-Triazanaphthalene

CN Copazoline



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

Ring System Data

Elemental Analysis	Elemental Sequence	Size of the Rings	Ring System Formula	Ring Identifier	RID Occurrence
EA	ES	SZ	RF	RID	Count
C4N2-C5N	NCNC3-NC5	6-6	C7N3	591.109.6	1

=> s c7h5n302/mf

L8 0 C7H5N302/MF

=> s l1 full

FULL SEARCH INITIATED 09:42:29 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2869 TO ITERATE

100.0% PROCESSED 2869 ITERATIONS

66 ANSWERS

SEARCH TIME: 00.00.01

L9 66 SEA SSS FUL L1

=> file caold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

221.31

221.52

FILE 'CAOLD' ENTERED AT 09:42:36 ON 23 SEP 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 19

L10 1 L9

=> d

L10 ANSWER 1 OF 1 CAOLD COPYRIGHT 2003 ACS on STN

AN CA54:19699g CAOLD

TI reactions of some heterocyclic vic-dicarboxamides with alkaline hypobromite

AU Jones, Reuben G.

IT 16082-04-5 20886-73-1 21260-12-8 22389-87-3 38174-10-6

42602-57-3 91673-53-9 98197-83-2 98198-18-6 98276-80-3 98550-06-2

99982-64-6 112843-04-6 118767-85-4 120614-16-6 120855-38-1

10/075,069

Thomas McKenzie

=> d page

L10 ANSWER 1 OF 1 CAOLD COPYRIGHT 2003 ACS on STN  
CA54:19699g

<CAOld PAGE IMAGE BYTES 152114>

66% 8-[bis(2-chloroethyl)aminomethyl]caffeine, m. 136.5-7.5°.

G. M. Kosolapoff  
Preparation of various substituted pyrimidines. Raymond P. Mariella and James J. Zelko (Loyola Univ., Chicago). *J. Org. Chem.* 25, 647-8(1960).—Substituted pyrimidines were prepd. by heating 3.6 g. of the appropriate  $\beta$ -dione or  $\beta$ -oxo ester with 1.5 g. guanidine carbonate (I) 3-4 hrs. at 130-40°, cooling the molten mass, dissolving in HCl, and pptg. the substituted pyrimidine by addg. dil.  $\text{NH}_4\text{OH}$ . The products were recrystd. from alc. in an average yield of 20%. The resp. picrates were prepd. by dissolving 0.1 g. of the pyrimidine in 5 ml. alc., adding a satd. soln. of picric acid in alc. and recrystg. the product from alc. In the case of the 2-amino-4-hydroxy-6-( $\alpha$ -thienyl)pyrimidine the acid-base technique was not used, but the pyrimidine was recrystd. from 80% alc. A 3.5 g. sample of Et nicotinoylacetate and 5 g. I heated 1 hr. at 140°, the molten mass cooled, and recrystd. from 80% alc. gave the substituted guanidine, m. 283-8° (decompn.) (80% alc.). The following 2-amino-4-substituted-6-( $\alpha$ -thienyl)pyrimidines were obtained (4-substituent, m.p., and m.p. of the picrate given): Me, 172°, 243-8°; Et, 139°, 233-7°; Pr, 116°, 213-14°; iso-Pr, 115°, 220-2°; Bu, 79°, 198-9°; iso-Bu, 110°, 175-6°; Am, 82°, 163-4°; OH, 308° (decompn.), 241-3°. The following 2-amino-4-substituted-6-( $\beta$ -pyridyl)pyrimidines were also obtained (4-substituent, m.p., and m.p. of the picrate given): Me, 205°, 245-9°; *tert*-Bu, 138°, 210-12°; iso-Bu, 149°, 206-7°; Ph, 166°, 223-5°.

B. K. Wasson  
Radioactive 5-bromouracil and 5-bromourotic acid. J. Filip and J. Morávek (Inst. Research Production & Application Radioisotopes, Prague). *Chem. & Ind. (London)* 1960, 260-1.—Bromination of uracil-2- $\text{C}^{14}$  with excess dioxane dibromide in dioxane gave a quant. yield of 5-bromouracil-2- $\text{C}^{14}$ . Brief boiling of equiv. amts. of uracil and  $\text{NaBr}^{82}$  in dil.  $\text{H}_2\text{SO}_4$  in the presence of  $\text{H}_2\text{O}_2$  gave high yields of bromouracil-5- $\text{Br}^{82}$ . Similarly prepd. were bromourotic-5- $\text{Br}^{82}$  acid (I) and bromourotic-2- $\text{C}^{14}$ , 5- $\text{Br}^{82}$  acid. Recrystn. of I from  $\text{H}_2\text{O}$  was used to replace the carboxyl (H) by T; subsequent decarboxylation gave 5-bromouracil (II) labeled with T or in combination with radioactive Br and T. The labile isotopic H from N-H bonds was removed by a 2-fold recrystn. from  $\text{H}_2\text{O}$ . The specific activity of labeled II did not change on further recrystns., which pointed to the stability of the C-T bond in position 8.

Rip G. Rice

Preparation of 3-sulfanilamido-6-methoxypyridazine. Zdzisław Brzozowski, Alodia Jackiewicz, Feliks Muzalewski, Tadeusz Stefański, and Teresa Szczepkowska (Zakłady Farmaceutyczne, Starogard Gdański, Poland). *Roczniki Chem.* 34, 299-301(1960)(German summary).—Different methods of prepn. of 3-sulfanilamido-6-methoxypyridazine (I) were investigated and that by action of  $\text{MeONa}$  on 3-sulfanilamido-6-chloropyridazine seemed to be the best. The appearance of by-products, which were difficult to remove, could be avoided by carrying out the reaction in the presence of pyridine. Raw I was purified by crystg. the Na salt from water, drying, and recrystg. from MeOH with anhyd. AcOH (pH 5.5-6.0), yield 70%.

A. Kreglewski

Reactions of some heterocyclic *vic*-dicarboxamides with alkaline hypobromite. Reuben G. Jones (Lilly Research Labs., Indianapolis, Indiana). *J. Org. Chem.* 25, 958-9 (1960).—Reaction of alk. hypobromite with some heterocyclic 1,2-dicarboxamides led to the prepn. of several bicyclic compds. contg. the pyrimidine ring fused to furan, pyridazine, and pyrimidine. Et 2-ethoxalyl-4-oxovalerate (I) (24.5 g.) in 500 ml. 95% alc. treated cold with 5 g.  $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$  in 50 ml. alc., the soln. left 1 hr. at room temp., evapd., the soln. dild. with 300 ml.  $\text{H}_2\text{O}$ , extd. with  $\text{Et}_2\text{O}$ , dried, and evapd. gave 20 g. di-Et 6-methyl-4,5-dihydro-3,4-pyridazinedicarboxylate, m. 88-7° (ligroine). I (345 g.) in 3 l. alc. treated during 1.5 hrs. with 70 g.  $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$ , the soln. left overnight, evapd. *in vacuo* to a sirup, and warmed 0.5 hr. on the steam bath to remove alc. gave crude di-Et 6-methyl-4,5-dihydro-3,4-pyridazinedicarboxylate (II). II (315 g.) in 2.75 l.  $\text{Me}_2\text{CO}$  added during 1 hr. to a hot soln. of 65 g.  $\text{KMnO}_4$  in 900 ml.  $\text{H}_2\text{O}$ , cooled, satd. with  $\text{CO}_2$ , the mixt. filtered, the  $\text{MnO}_2$  cake washed with  $\text{Me}_2\text{CO}$ , the filtrate evapd., and the residue extd. with  $\text{Et}_2\text{O}$  gave 35 g. forerun, b<sub>p</sub> 112-15°, shown to be di-Et 5-methyl-2,3-furandicarboxylate, and 128 g. di-Et 6-methyl-3,4-pyridazinedicarboxylate (III), m. 53-3.5° (ligroine). III (12 g.) hydrolyzed by warming with 5 g. NaOH in 50 ml.  $\text{H}_2\text{O}$  and

the soln. acidified gave 8.75 g. 6-methyl-3,4-pyridazinedicarboxylic acid, m. 235-7° (decompn.). III (47.6 g.) left 3 days at room temp. with 400 ml. MeOH satd. with  $\text{NH}_3$  gave 35 g. 6-methyl-3,4-pyridazinedicarboxamide, m. 245-6° (aq. alc.). Di-Et 2,6-dimethyl-3,4-pyridinedicarboxylate (70 g.) in 500 ml. MeOH satd. with  $\text{NH}_3$  left 3 days and the mixt. evapd. gave 42 g. 2,6-dimethyl-3,4-pyridinedicarboxamide (IIIa), m. 213-14°. Di-Et 2-hydroxy-4,5-pyrimidinedicarboxylate (48 g.) added to 300 ml. concd. aq.  $\text{NH}_3$ , the mixt. left 2 days, and the product collected gave 32 g. ammonium salt of 2-hydroxy-4,5-pyrimidinedicarboxamide (IV), decompd. above 300°. IV (30 g.) ground to a fine powder and suspended in 100 ml. 20% AcOH, the suspension heated 2 hrs., and cooled gave 24.3 g. 2-hydroxy-4,5-pyrimidinedicarboxamide, decompd. above 300°. Di-Et 2-methyl-4,5-furandicarboxylate (45.2 g.) in 150 ml. MeOH contg. 40 g.  $\text{NH}_3$  kept 3 days in a stoppered flask gave 30 g. 2-methyl-4,5-furandicarboxamide (IVa), m. 257-8° (aq. alc.). Di-Et 3,4-furandicarboxylate (63.6 g.) in 500 ml. MeOH satd. with  $\text{NH}_3$  left 4 days at room temp., the mixt. treated with an addnl. 50 ml. liquid  $\text{NH}_3$ , and left 4 more days gave 45 g. 3,4-furandicarboxamide (V). Di-Me 3,4-thiophenedicarboxylate (20 g.) in 250 ml. MeOH satd. with  $\text{NH}_3$  left 5 days gave 16.7 g. 3,4-thiophenedicarboxamide, m. 237-9° ( $\text{H}_2\text{O}$ ). V (15.4 g.) stirred with a hypobromite soln., prepd. from 61.6 g. KOH in 180 ml.  $\text{H}_2\text{O}$ , 400 g. ice, and 32 g. Br, the mixt. left 2 days at room temp., heated 1 hr. on the steam bath, acidified with 70 ml. AcOH, left 5 days at room temp., dissolved in hot  $\text{NH}_4\text{OH}$  soln., and repptd. with AcOH gave 1.4 g. solid 4,6-dihydroxy-2-oxa-5,7-diazaindene. Finely powd. IVa allowed to react with KOBr as described above gave 25% 4,6-dihydroxy-2-methyl-1-oxa-5,7-diazaindene or 5,7-dihydroxy-2-methyl-1-oxa-4,6-diazaindene. IIIa allowed to react as above with hypobromite soln., refrigerated overnight, heated 1 hr., and acidified gave 75% 1,3-dihydroxy-5,7-dimethyl-2,4,6-triazanaphthalene, m. 355-7° (AcOH). 3-Methyl-5,6-pyridazinedicarboxamide (0.1 mole) added at once to a hypobromite soln., the mixt. refrigerated overnight, heated 1 hr. on the steam bath, acidified, the mixt. refrigerated a 2nd night, and the solid collected gave 79% 1,3-dihydroxy-7-methyl-2,4,5,6-tetraazanaphthalene (VI). In another expt. the mixt. neither cooled nor heated prior to acidification, but left 12 hrs. at room temp. gave 22% VI. 2-Hydroxy-4,5-dicarbamoylpyrimidine allowed to react with hypobromite gave 74% 1,3,8-trihydroxy-2,4,5,7-tetraazanaphthalene, not m. below 360° (hot dil.  $\text{NH}_4\text{OH}$  and repptd. with AcOH).

B. K. Wasson

Reactions of carboxylic acid-phosphorus trihalide systems. II. Salicylic acid. J. A. Cade and W. Gerrard (At. Energy Research Estab. Harwell, Engl.). *J. Chem. Soc.* 1960, 1249-53; cf. CA 49, 8093a.—In the presence of a tertiary base, the bicyclic phosphorochloridite, 2-chloro-4-oxo-1,3-dioxo-2-phosphanaphthalene (I), formed by the reaction of salicylic acid (II) and  $\text{PCl}_5$ , gave with acids, such as AcOH, an anhydride (III) and 4-oxo-1,3-dioxo-2-phosphanaphthalene 2-oxide (IV), but with  $\text{BzOH}$  a benzoyloxy deriv. (V) was obtained. With HCl, I gave II and  $\text{PCl}_5$ ; IV behaved similarly. The butoxy deriv. (VI) of I gave the acid and Bu phosphorodichloridite (VII). A reaction of II and a tervalent P halide appeared to involve a preliminary attack on the phenolic OH group, even in the presence of a base. II (13.8 g.), 15 cc. PhMe, and 15 g.  $\text{PCl}_5$  refluxed 3 hrs. and the product distd. gave 14 g. I, b<sub>p</sub> 129-32°. Similarly, 13.8 g. II and 30 g.  $\text{PBr}_5$  gave 8.45 g. 2-bromo-4-oxo-1,3-dioxo-2-phosphanaphthalene, b<sub>p</sub> 143°. II (13.8 g.) and 15.8 g.  $\text{C}_6\text{H}_5\text{N}$  in 50 cc.  $\text{Et}_2\text{O}$  added at -10° to 13.8 g.  $\text{PCl}_5$  in 100 cc.  $\text{Et}_2\text{O}$  and 23.5 g.  $\text{C}_6\text{H}_5\text{N} \cdot \text{HCl}$  filtered off gave from the filtrate 11.5 g. I. BuOH (3.7 g.) and 3.95 g.  $\text{C}_6\text{H}_5\text{N}$  in 50 cc.  $\text{Et}_2\text{O}$  left 1 hr. at -10° with 10.1 g. I gave VI, b<sub>p</sub> 99-100°,  $n_D^{20}$  1.5250,  $d_4^{20}$  1.191, and 5.65 g. base hydrochloride. Reversing the order of addn. did not significantly affect the yield. VI was obtained when an equiv. amt. of the bromidite was used. Bu phosphorodichloridite (8.8 g.) in 50 cc.  $\text{Et}_2\text{O}$  added at -10° to 6.9 g. II and 7.9 g.  $\text{C}_6\text{H}_5\text{N}$  in 100 cc.  $\text{Et}_2\text{O}$  gave 86% VI. VI (2.5 g.) with cold  $\text{H}_2\text{O}$  gave 1.2 g. II, m. 158-9°; the  $\text{Et}_2\text{O}$  soln. gave 0.6 g. oil. AcOH (7.25 g.) was added rapidly to 24.9 g. molten I, the mixt. shaken, and volatile material removed at 20°/15 mm., then at 20°/0.1 mm. Distn. gave 5.5 g. AcCl, b. 50-2°, 1 g. impure AcOH, and 0.3 g. residue. The primary residue of 24 g. m. 92-124°. A portion (10 g.) in 20 cc.  $\text{CHCl}_3$  and 20 cc. heptane gave



START LOCAL KERMIT RECEIVE PROCESS

BINARY DATA HAVE BEEN DOWNLOADED TO MULTIPLES FILES 'IMAGEEnnn.TIF'

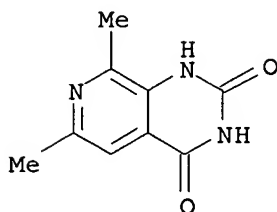
=> d hitstr

L10 ANSWER 1 OF 1 CAOLD COPYRIGHT 2003 ACS on STN

IT 22389-87-3

RN 22389-87-3 CAOLD

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6,8-dimethyl- (8CI) (CA INDEX NAME)



=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

6.12

227.64

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-0.62

-0.62

FILE 'CAPLUS' ENTERED AT 09:44:15 ON 23 SEP 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 23 Sep 2003 VOL 139 ISS 13

FILE LAST UPDATED: 22 Sep 2003 (20030922/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 19

L11 26 L9

=> s (arthritis OR psoriasis OR arteriosclerosis OR asthma OR cancer OR mmp-13 OR (collagenase 3) AND l11)

30180 ARTHRITIS

9257 PSORIASIS

54 ARTERIOSCLEROSIS

22010 ASTHMA

196853 CANCER

7957 MMP

722912 13

571 MMP-13

(MMP (W) 13)

14480 COLLAGENASE

5877338 3

402 COLLAGENASE 3

(COLLAGENASE (W) 3)

L12 252394 (ARTHRITIS OR PSORIASIS OR ARTERIOSCLEROSIS OR ASTHMA OR CANCER OR MMP-13 OR (COLLAGENASE 3) AND L11)

=> s arthritis OR psoriasis OR arteriosclerosis OR asthma OR cancer OR mmp-13 OR (collagenase(L) 3

UNMATCHED LEFT PARENTHESIS 'OR (COLLAGENAS'

The number of right parentheses in a query must be equal to the number of left parentheses.

=> s arthritis OR psoriasis OR arteriosclerosis OR asthma OR cancer OR mmp-13 OR collagenase(L) 3

30180 ARTHRITIS

9257 PSORIASIS

54 ARTERIOSCLEROSIS

22010 ASTHMA

196853 CANCER

7957 MMP

722912 13

571 MMP-13

(MMP (W) 13)

14480 COLLAGENASE

5877338 3

4317 COLLAGENASE (L) 3

L13 256139 ARTHRITIS OR PSORIASIS OR ARTERIOSCLEROSIS OR ASTHMA OR CANCER OR MMP-13 OR COLLAGENASE (L) 3

=> s l11 and l13

L14 4 L11 AND L13

=> d 1-4 cbib pi hitstr

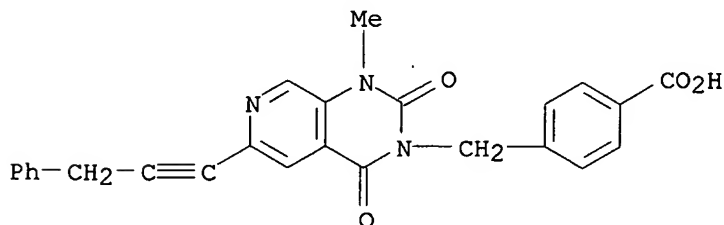
L14 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

2003:319883 Document No. 138:338166 Preparation of alkynylated fused ring pyrimidine compounds as matrix metalloprotease 13 inhibitors.

Gaudilliere, Bernard; Jacobelli, Henry; Wilson, Michael William; Picard, Joseph Armand (Warner-Lambert Company LLC, USA). PCT Int. Appl. WO 2003033478 A1 20030424, 99 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

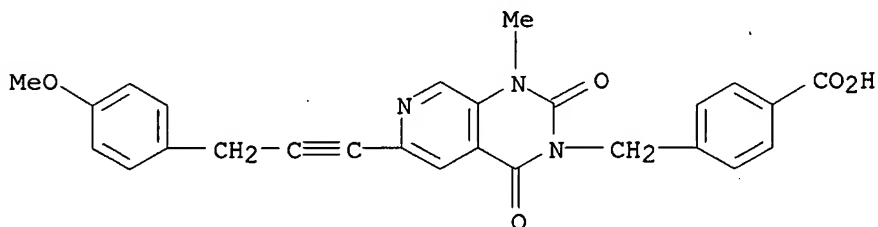
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-EP12194 20021011. PRIORITY: WO 2001-EP11824 20011012; WO 2002-EP8475 20020712.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003033478	A1	20030424	WO 2002-EP12194	20021011
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				
WO 2003033477	A1	20030424	WO 2001-EP11824	20011012
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				
IT	<p><b>451471-53-7P</b>, 4-[[1-Methyl-2,4-dioxo-6-(3-phenylprop-1-ynyl)-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoic acid</p> <p><b>451471-54-8P</b>, 4-[[6-[3-(4-Methoxyphenyl)prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoic acid</p> <p>RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)</p> <p>(<b>MMP-13</b> inhibitor; preparation of alkynylated fused ring pyrimidines as <b>MMP-13</b> inhibitors for treatment of <b>arthritis, cancer, and other MMP-13 mediated diseases</b>)</p>			
RN	451471-53-7 CAPLUS			
CN	Benzoic acid, 4-[[1,4-dihydro-1-methyl-2,4-dioxo-6-(3-phenyl-1-propynyl)pyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)			



RN 451471-54-8 CAPLUS

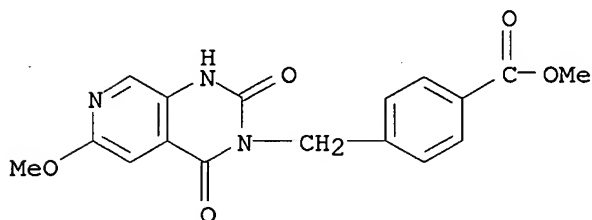
CN Benzoic acid, 4-[[1,4-dihydro-6-[3-(4-methoxyphenyl)-1-propynyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



IT **451471-66-2P**, Methyl 4-[(6-methoxy-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoate **451471-67-3P**, Methyl 4-[(6-methoxy-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoate **451471-68-4P**, 4-[(6-Hydroxy-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoic acid **451471-69-5P**, 4-[(1-Methyl-2,4-dioxo-6-trifluoromethanesulfonyloxy-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoic acid  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of alkynylated fused ring pyrimidines as **MMP-13** inhibitors for treatment of **arthritis**, **cancer**, and other **MMP-13** mediated diseases)

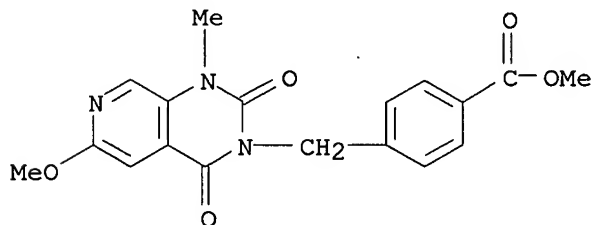
RN 451471-66-2 CAPLUS

CN Benzoic acid, 4-[(1,4-dihydro-6-methoxy-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



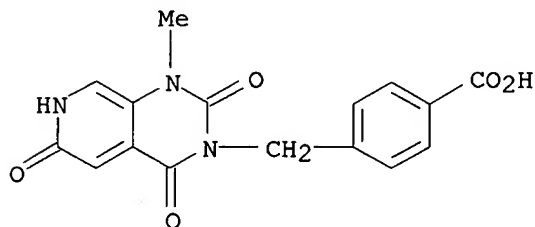
RN 451471-67-3 CAPLUS

CN Benzoic acid, 4-[(1,4-dihydro-6-methoxy-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



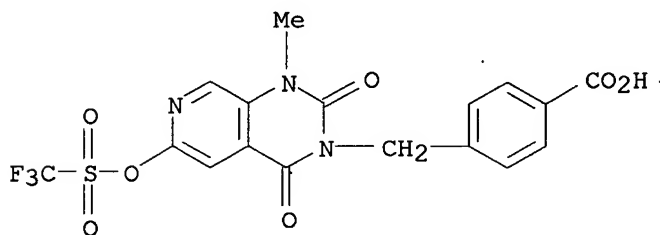
RN 451471-68-4 CAPLUS

CN Benzoic acid, 4-[(1,4,6,7-tetrahydro-1-methyl-2,4,6-trioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



RN 451471-69-5 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-1-methyl-2,4-dioxo-6-[[[(trifluoromethyl)sulfonyl]oxy]pyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

2003:319882 Document No. 138:338159 Preparation of alkynylated fused ring pyrimidine compounds as matrix metalloprotease 13 inhibitors.

Gaudilliere, Bernard; Jacobelli, Henry (Warner-Lambert Company, USA). PCT Int. Appl. WO 2003033477 A1 20030424, 68 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-EP11824 20011012.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003033477	A1	20030424	WO 2001-EP11824	20011012
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2003033478	A1	20030424	WO 2002-EP12194	20021011
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,			

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,  
RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,  
NE, SN, TD, TG

US 2003130278 A1 20030710 US 2002-269197 20021011

IT **451471-53-7P**, 4-[[1-Methyl-2,4-dioxo-6-(3-phenylprop-1-ynyl)-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoic acid

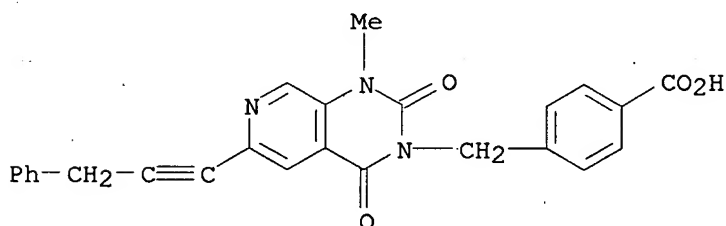
**451471-54-8P**, 4-[[6-[3-(4-Methoxyphenyl)prop-1-ynyl]-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoic acid

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(**MMP-13** inhibitor; preparation of alkynylated fused ring pyrimidine compds. as **MMP-13** inhibitors for treatment of **arthritis, cancer**, and other **MMP-13** mediated diseases)

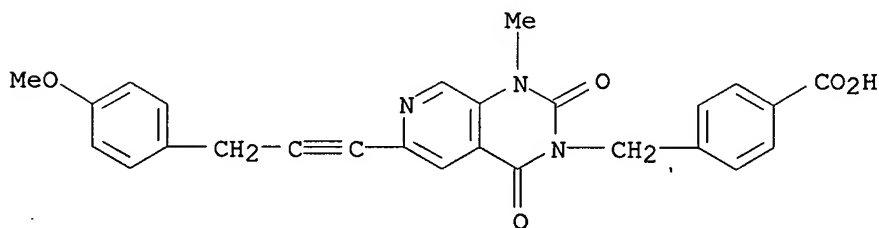
RN 451471-53-7 CAPLUS

CN Benzoic acid, 4-[[1,4-dihydro-1-methyl-2,4-dioxo-6-(3-phenyl-1-propynyl)pyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



RN 451471-54-8 CAPLUS

CN Benzoic acid, 4-[[1,4-dihydro-6-[3-(4-methoxyphenyl)-1-propynyl]-1-methyl-2,4-dioxopyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



IT **451471-66-2P**, Methyl 4-[(6-methoxy-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoate **451471-67-3P**, Methyl 4-[(6-methoxy-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoate **451471-68-4P**, 4-[(6-Hydroxy-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoic acid **451471-69-5P**, 4-[(1-Methyl-2,4-dioxo-6-trifluoromethanesulfonyloxy-

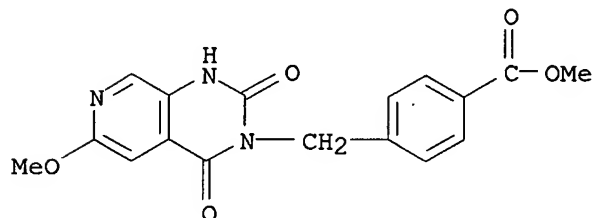
1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl)methyl]benzoic acid

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of alkynylated fused ring pyrimidine compds. as **MMP-13** inhibitors for treatment of **arthritis**, **cancer**, and other **MMP-13** mediated diseases)

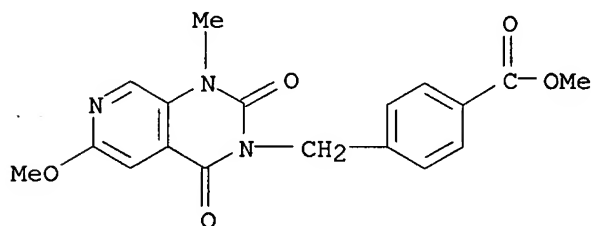
RN 451471-66-2 CAPLUS

CN Benzoic acid, 4-[(1,4-dihydro-6-methoxy-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



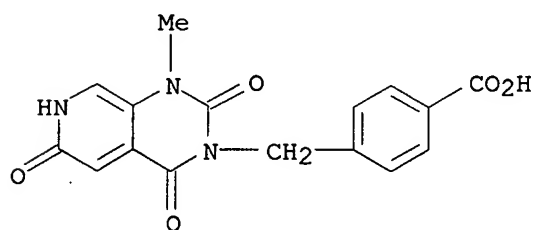
RN 451471-67-3 CAPLUS

CN Benzoic acid, 4-[(1,4-dihydro-6-methoxy-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



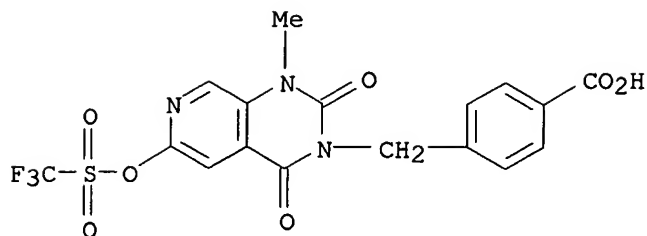
RN 451471-68-4 CAPLUS

CN Benzoic acid, 4-[(1,4,6,7-tetrahydro-1-methyl-2,4,6-trioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



RN 451471-69-5 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-1-methyl-2,4-dioxo-6-[[[(trifluoromethyl)sulfonyl]oxy]pyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



L14 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

2002:637660 Document No. 137:185501 Preparation of quinazolines as specific inhibitors of type-13 matrix metalloprotease. Andrianjara, Charles; Chantel-Barvian, Nicole; Gaudilliere, Bernard; Jacobelli, Henri; Ortwine, Daniel Fred; Patt, William Chester; Pham, Ly; Kostlan, Catherine Rose; Wilson, Michael William (Warner-Lambert Company, USA). PCT Int. Appl. WO 2002064572 A1 20020822, 264 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-EP1979 20020211. PRIORITY: US 2001-PV268661 20010214.

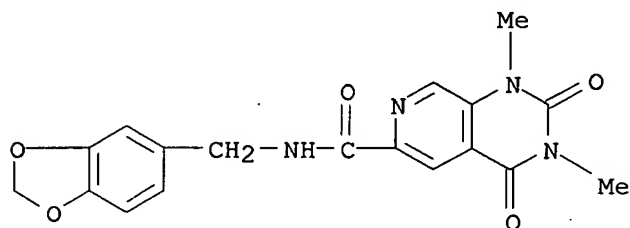
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002064572	A1	20020822	WO 2002-EP1979	20020211
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				
US 2002193377	A1	20021219	US 2002-75954	20020213
IT 449210-01-9P,	1,3-Dimethyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylic acid [benzo[1,3]dioxol-5-ylmethyl]amide			
449210-13-3P,	3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylic acid [benzo[1,3]dioxol-5-ylmethyl]amide			
449210-20-2P,	Methyl 4-[[6-(4-Methoxybenzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoate			
449210-23-5P,	tert-Butyl 4-[[6-(4-methoxybenzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoate			
449210-24-6P,	4-[[6-(3-Methoxybenzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoic acid			
449210-27-9P	4-[[6-(4-Methoxybenzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoic acid			
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)	(MMP13 inhibitor; preparation of quinazolines as specific inhibitors of			



type-13 matrix metalloprotease)

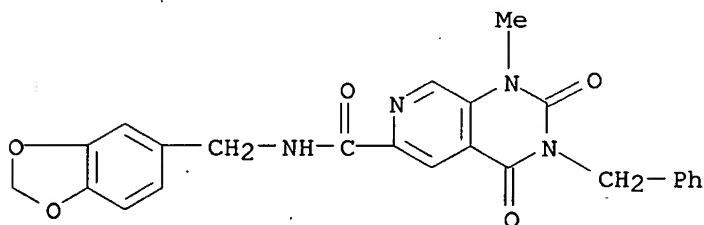
RN 449210-01-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, N-(1,3-benzodioxol-5-ylmethyl)-1,2,3,4-tetrahydro-1,3-dimethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



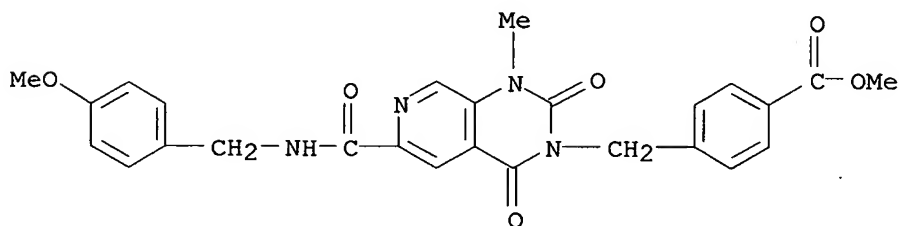
RN 449210-13-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, N-(1,3-benzodioxol-5-ylmethyl)-1,2,3,4-tetrahydro-1-methyl-2,4-dioxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



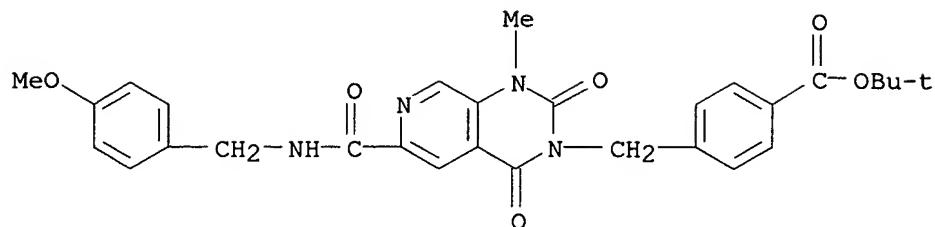
RN 449210-20-2 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(4-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxopyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



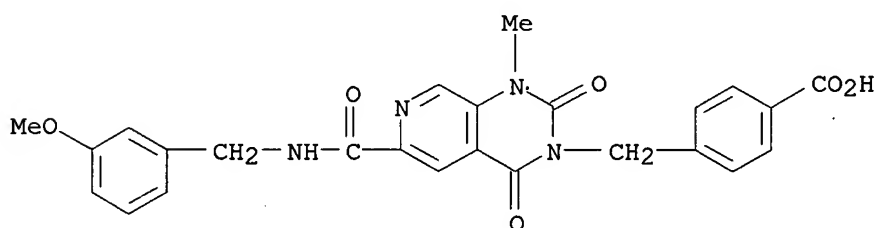
RN 449210-23-5 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(4-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxopyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



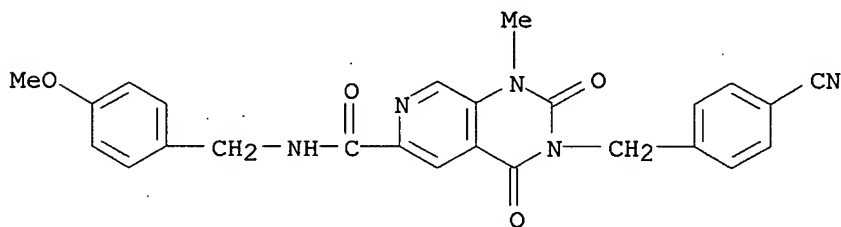
RN 449210-24-6 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(3-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



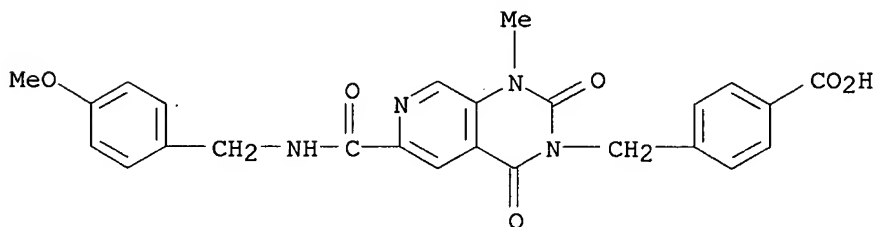
RN 449210-27-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, 3-[(4-cyanophenyl)methyl]-1,2,3,4-tetrahydro-N-[(4-methoxyphenyl)methyl]-1-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)

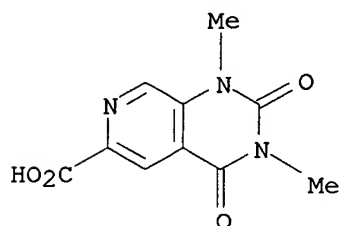


RN 449210-47-3 CAPLUS

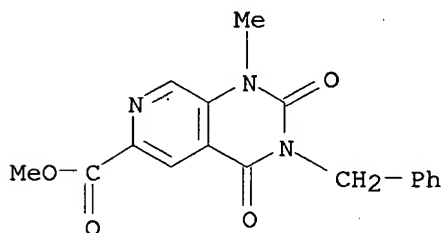
CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(4-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



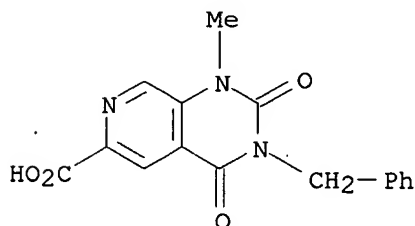
- IT **449210-02-0P**, 1,3-Dimethyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylic acid **449210-18-8P**, 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylic acid methyl ester **449210-19-9P**, 3-Benzyl-1-methyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylic acid **449210-21-3P**, 1-Methyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylic acid **449210-22-4P 449210-25-7P 449210-26-8P**, tert-Butyl 4-[[6-(3-Methoxybenzylcarbamoyl)-1-methyl-2,4-dioxo-1,4-dihydro-2H-pyrido[3,4-d]pyrimidin-3-yl]methyl]benzoate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate; preparation of quinazolines as specific inhibitors of type-13 matrix metalloprotease)
- RN **449210-02-0** CAPLUS
- CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1,3-dimethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



- RN **449210-18-8** CAPLUS
- CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1-methyl-2,4-dioxo-3-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

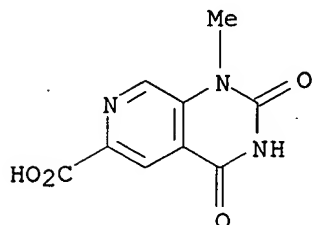


- RN **449210-19-9** CAPLUS
- CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1-methyl-2,4-dioxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



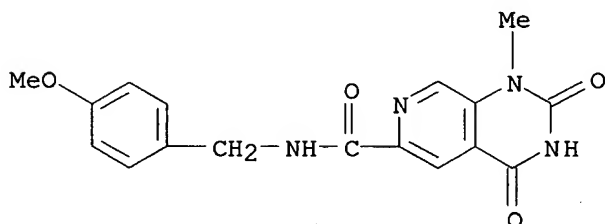
RN 449210-21-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



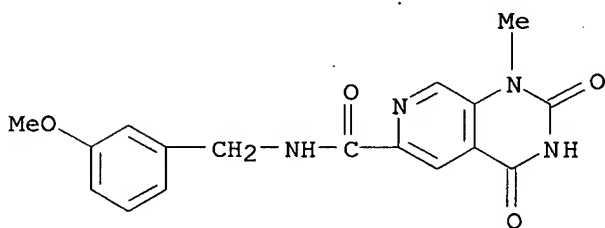
RN 449210-22-4 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, 1,2,3,4-tetrahydro-N-[(4-methoxyphenyl)methyl]-1-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



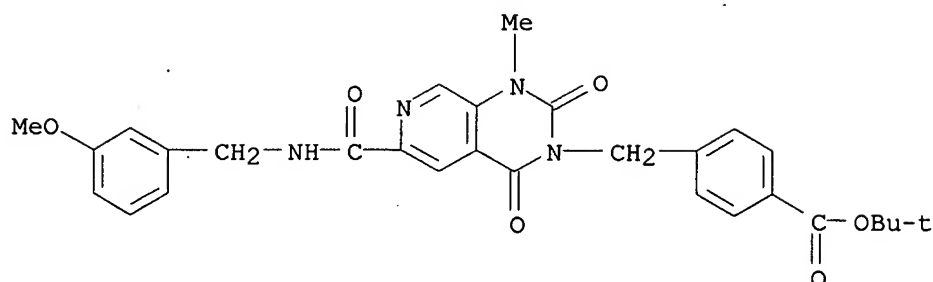
RN 449210-25-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, 1,2,3,4-tetrahydro-N-[(3-methoxyphenyl)methyl]-1-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)

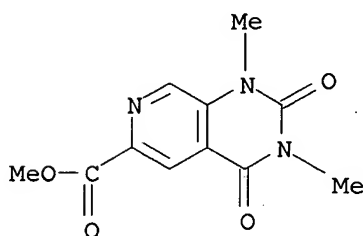


RN 449210-26-8 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(3-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxopyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



IT **154470-79-8**, Methyl 1,3-dimethyl-2,4-dioxo-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-6-carboxylate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; preparation of quinazolines as specific inhibitors of type-13 matrix metalloprotease)  
 RN 154470-79-8 CAPLUS  
 CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



L14 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
 2002:637472 Document No. 137:201321 Preparation of substituted isophthalic acid derivatives, multicyclic pyrimidinediones and analogs thereof as matrix metalloproteinase inhibitors. Andrianjara, Charles; Ortwine, Daniel Fred; Pavlovsky, Alexander Gregory; Roark, William Howard (Warner-Lambert Company, USA). PCT Int. Appl. WO 2002064080 A2 20020822, 173 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2002-IB447 20020213. PRIORITY: US 2001-PV268821 20010214.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002064080	A2	20020822	WO 2002-IB447	20020213
WO 2002064080	A3	20021212		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,			

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,  
 TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003078276 A1 20030424 US 2002-75069 20020213

IT 449210-18-8P 449210-19-9P 449210-21-3P

449210-22-4P 451471-66-2P 451471-67-3P

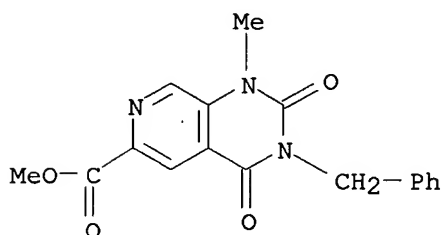
451471-68-4P 451471-69-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(intermediate; preparation and pharmaceutical activity of substituted  
 isophthalic acid derivs., multicyclic pyrimidinediones and analogs  
 thereof as matrix metalloproteinase inhibitors)

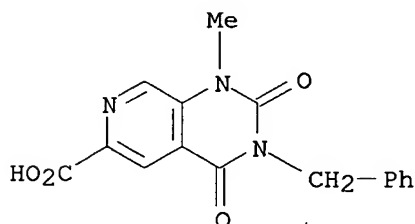
RN 449210-18-8 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1-methyl-2,4-  
 dioxo-3-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)



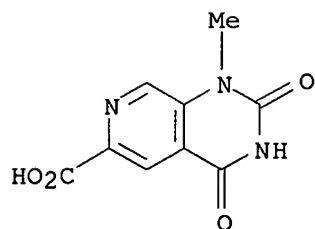
RN 449210-19-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1-methyl-2,4-  
 dioxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



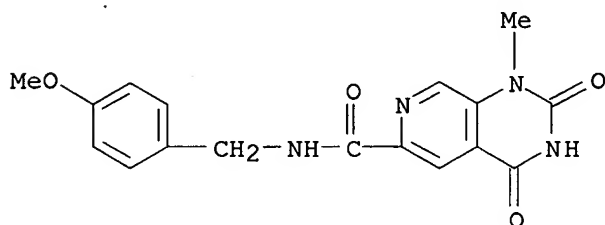
RN 449210-21-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1-methyl-2,4-  
 dioxo- (9CI) (CA INDEX NAME)



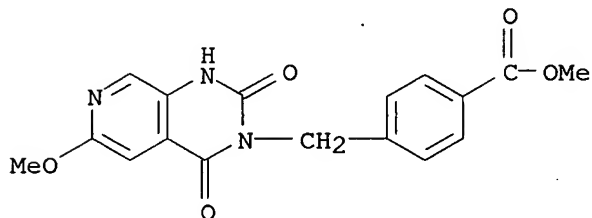
RN 449210-22-4 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, 1,2,3,4-tetrahydro-N-[(4-methoxyphenyl)methyl]-1-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



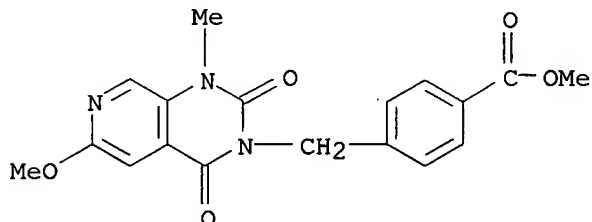
RN 451471-66-2 CAPLUS

CN Benzoic acid, 4-[(1,4-dihydro-6-methoxy-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 451471-67-3 CAPLUS

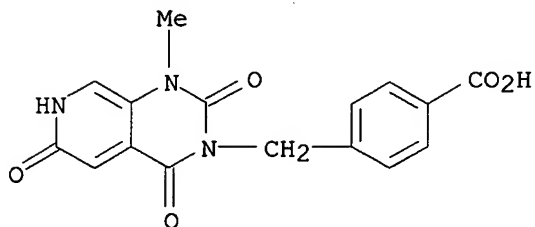
CN Benzoic acid, 4-[(1,4-dihydro-6-methoxy-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 451471-68-4 CAPLUS

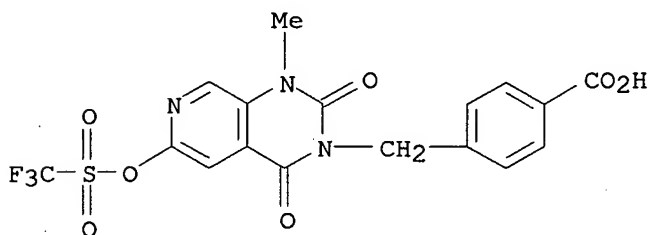
CN Benzoic acid, 4-[(1,4,6,7-tetrahydro-1-methyl-2,4,6-trioxypyrido[3,4-

d]pyrimidin-3(2H)-yl)methyl]- (9CI) (CA INDEX NAME)



RN 451471-69-5 CAPLUS

CN Benzoic acid, 4-[[1,4-dihydro-1-methyl-2,4-dioxo-6-  
[[[(trifluoromethyl)sulfonyl]oxy]pyrido[3,4-d]pyrimidin-3(2H)-yl)methyl]-  
(9CI) (CA INDEX NAME)]



IT 449210-01-9P 449210-13-3P 449210-20-2P

449210-24-6P 449210-27-9P 449210-47-3P

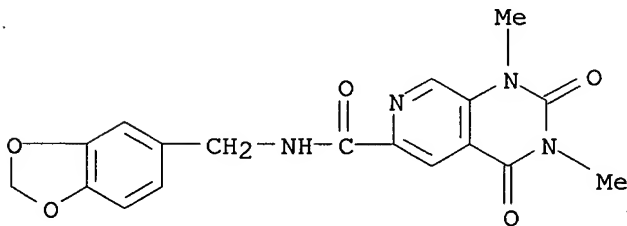
451471-53-7P 451471-54-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)

(target compound; preparation and pharmaceutical activity of substituted  
isophthalic acid derivs., multicyclic pyrimidinediones and analogs  
thereof as matrix metalloproteinase inhibitors)

RN 449210-01-9 CAPLUS

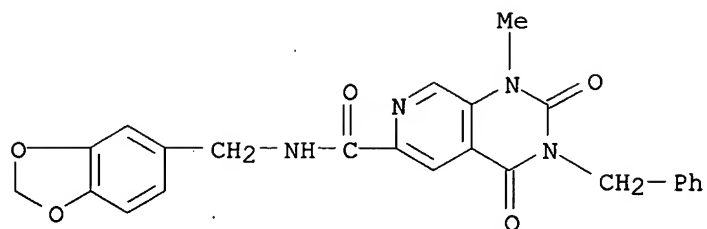
CN Pyrido[3,4-d]pyrimidine-6-carboxamide, N-(1,3-benzodioxol-5-ylmethyl)-  
1,2,3,4-tetrahydro-1,3-dimethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



RN 449210-13-3 CAPLUS

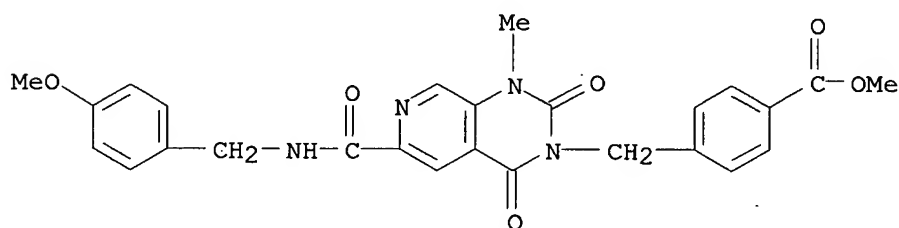
CN Pyrido[3,4-d]pyrimidine-6-carboxamide, N-(1,3-benzodioxol-5-ylmethyl)-  
1,2,3,4-tetrahydro-1-methyl-2,4-dioxo-3-(phenylmethyl)- (9CI) (CA INDEX  
NAME)





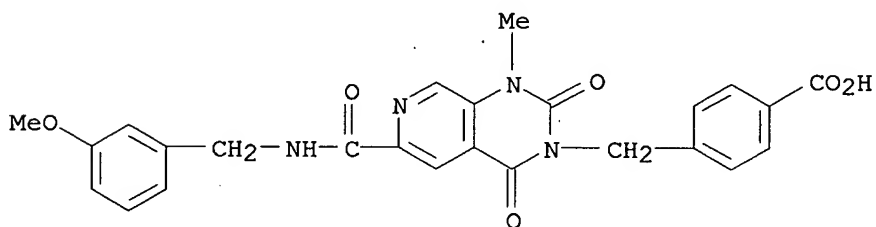
RN 449210-20-2 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(4-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]-, methyl ester (9CI) (CA INDEX NAME)



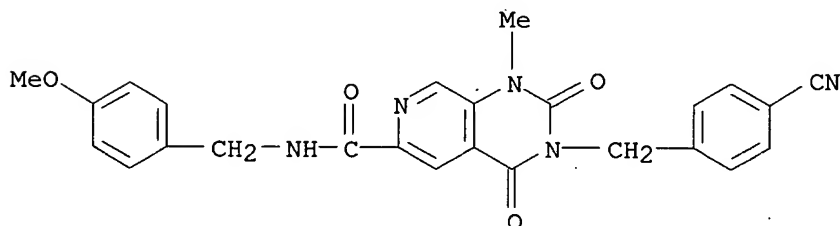
RN 449210-24-6 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(3-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



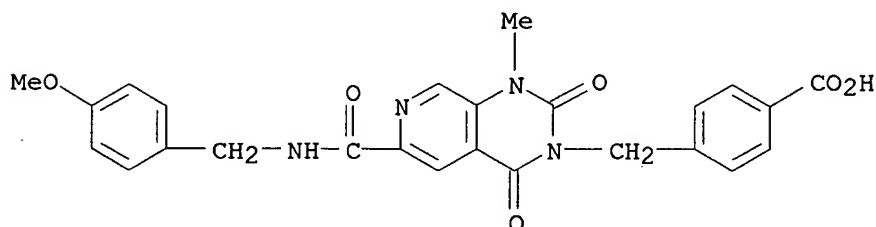
RN 449210-27-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxamide, 3-[(4-cyanophenyl)methyl]-1,2,3,4-tetrahydro-N-[(4-methoxyphenyl)methyl]-1-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



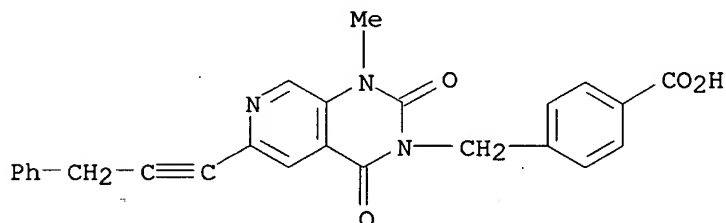
RN 449210-47-3 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[[[(4-methoxyphenyl)methyl]amino]carbonyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



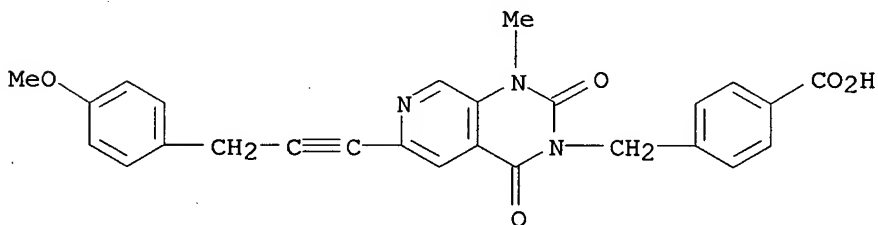
RN 451471-53-7 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-1-methyl-2,4-dioxo-6-(3-phenyl-1-propynyl)pyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



RN 451471-54-8 CAPLUS

CN Benzoic acid, 4-[[[1,4-dihydro-6-[3-(4-methoxyphenyl)-1-propynyl]-1-methyl-2,4-dioxypyrido[3,4-d]pyrimidin-3(2H)-yl]methyl]- (9CI) (CA INDEX NAME)



=&gt; d his

(FILE 'HOME' ENTERED AT 09:36:22 ON 23 SEP 2003)

FILE 'REGISTRY' ENTERED AT 09:36:33 ON 23 SEP 2003

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 0 S PYRIDO[3,4-D]PYRIMIDIN-2,4-DIONE

L4 0 S PYRIDO[3,4-D]PYRIMIDIN-2,4-DIONE/CN

L5 0 S PYRIDO[3,4-D]PYRIMIDIN-2,4-DIONE/CNS  
L6 85 S C7H5N3/MF  
L7 1 S PYRIDO[3,4-D]PYRIMIDIN?/CNS AND L6  
L8 0 S C7H5N3O2/MF  
L9 66 S L1 FULL

FILE 'CAOLD' ENTERED AT 09:42:36 ON 23 SEP 2003  
L10 1 S L9

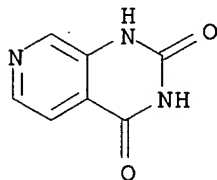
FILE 'CAPLUS' ENTERED AT 09:44:15 ON 23 SEP 2003  
L11 26 S L9  
L12 252394 S (ARTHRITIS OR PSORIASIS OR ARTEROSCLEROSIS OR ASTHMA OR CANC  
L13 256139 S ARTHRITIS OR PSORIASIS OR ARTEROSCLEROSIS OR ASTHMA OR CANC  
L14 4 S L11 AND L13

=> s l11 not l14  
L15 22 L11 NOT L14

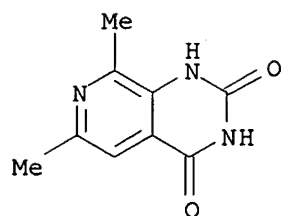
=> sort py l15  
SORT ENTIRE ANSWER SET? (Y)/N:.  
PROCESSING COMPLETED FOR L15  
L16 22 SORT L15 PY

=> d 1-22 cbib pi hitstr

L16 ANSWER 1 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN  
1953:9283 Document No. 47:9283 Original Reference No. 47:1703d-i,1704a  
Synthetic tuberculostats. II. Amino- and hydroxypyridine carboxylic acid  
derivatives. Fox, H. Herbert (Hoffmann-La Roche, Inc., Nutley, NJ).  
Journal of Organic Chemistry, 17, 547-54 (Unavailable) 1952. CODEN:  
JOCEAH. ISSN: 0022-3263.  
IT 21038-67-5, Pyrido[3,4-d]pyrimidine-2,4(1H,3H)dione  
(preparation of)  
RN 21038-67-5 CAPLUS  
CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN  
1960:103479 Document No. 54:103479 Original Reference No.  
54:19699g-i,19700a-f Reactions of some heterocyclic vic-dicarboxamides  
with alkaline hypobromite. Jones, Reuben G. (Lilly Research Labs.,  
Indianapolis, IN). Journal of Organic Chemistry, 25, 956-9 (Unavailable)  
1960. CODEN: JOCEAH. ISSN: 0022-3263.  
IT 22389-87-3, Pyrido[3,4-d]pyrimidine-2,4-diol, 6,8-dimethyl-  
(preparation of)  
RN 22389-87-3 CAPLUS  
CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6,8-dimethyl- (8CI) (CA INDEX  
NAME)



L16 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

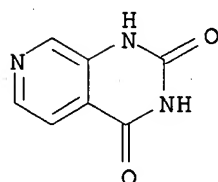
1969:11669 Document No. 70:11669 Reactions of lead tetraacetate. III. Formation of pyrimidinediones and related compounds from dicarboxylic acid amides. Beckwith, Athelstan L. J.; Hickman, R. J. (Univ. Adelaide, Adelaide, Australia). Journal of the Chemical Society [Section] C: Organic (22), 2756-9 (English) 1968. CODEN: JSOOAX. ISSN: 0022-4952.

IT 21038-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 21038-67-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1969:429903 Document No. 71:29903 Pyridopyrimidines. VI. Fragmentation of some pyridopyrimidin-4(3H)-ones and pyridopyrimidine-2,4(1H,3H)-diones induced by electron impact. Gelling, I. R.; Irwin, W. J.; Wibberley, Denman G. (Dep. Pharm., Univ. Aston, Birmingham, UK). Journal of the Chemical Society [Section] B: Physical Organic (5), 513-17 (English) 1969. CODEN: JCSPAC. ISSN: 0045-6470.

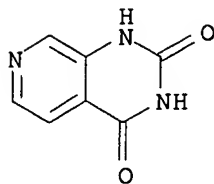
IT 21038-67-5 22389-80-6 22389-81-7

22389-83-9 22389-87-3

RL: PRP (Properties)  
(mass spectrum of)

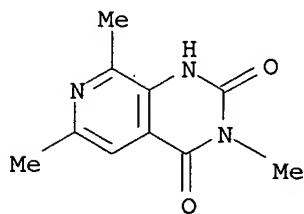
RN 21038-67-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)



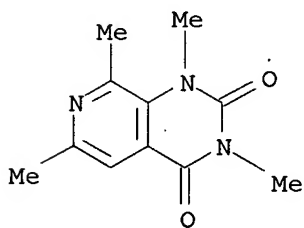
RN 22389-80-6 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3,6,8-trimethyl- (8CI) (CA INDEX NAME)



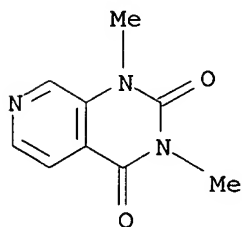
RN 22389-81-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 1,3,6,8-tetramethyl- (8CI, 9CI) (CA INDEX NAME)



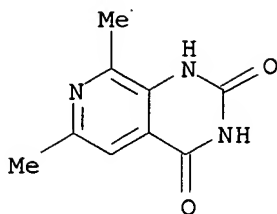
RN 22389-83-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 1,3-dimethyl- (8CI) (CA INDEX NAME)



RN 22389-87-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6,8-dimethyl- (8CI) (CA INDEX NAME)



L16 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1969:115099 Document No. 70:115099 Pyridopyrimidines. V. Syntheses and properties of pyrido[3,4-d]-pyrimidin-4(3H)-ones and -pyrimidine-2,4(1H,3H)-diones. Gelling, I. R.; Wibberley, Denman G. (Dep. Pharm., Univ. Aston, Birmingham, UK). Journal of the Chemical Society [Section] C: Organic (6), 931-4 (English) 1969. CODEN: JSOOAX. ISSN: 0022-4952.

IT 21038-67-5P 22389-77-1P 22389-78-2P

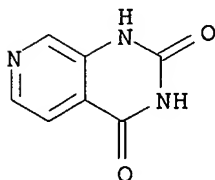
22389-80-6P 22389-81-7P 22389-83-9P

22389-87-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

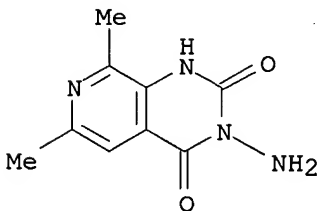
RN 21038-67-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)



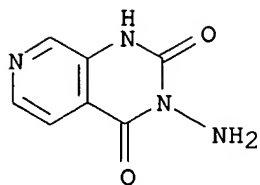
RN 22389-77-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-amino-6,8-dimethyl- (8CI) (CA INDEX NAME)



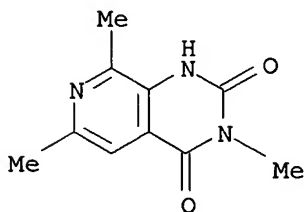
RN 22389-78-2 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-amino- (8CI) (CA INDEX NAME)



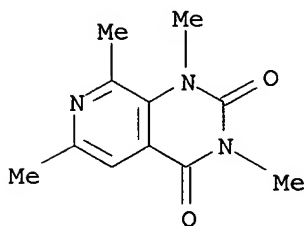
RN 22389-80-6 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3,6,8-trimethyl- (8CI) (CA INDEX NAME)



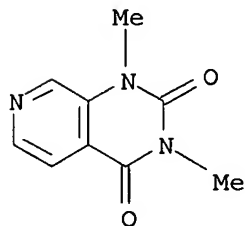
RN 22389-81-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 1,3,6,8-tetramethyl- (8CI, 9CI) (CA INDEX NAME)



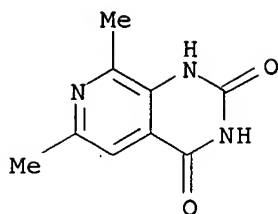
RN 22389-83-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 1,3-dimethyl- (8CI) (CA INDEX NAME)



RN 22389-87-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6,8-dimethyl- (8CI) (CA INDEX NAME)



L16 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1971:125442 Document No. 74:125442 Aryl pyridine carboxylic acids and their derivatives, for preventing and arresting edema and granuloma. Shen, Tsung-Ying; Walford, Gordon L.; Witzel, Bruce E.; Ruyle, William V. (Merck and Co., Inc.). Ger. Offen. DE 2031230 19710107, 156 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1970-2031230 19700624.

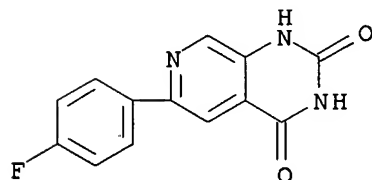
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2031230	A	19710107	DE 1970-2031230	19700624
US 3655679	A	19720411	US 1969-836621	19690625
US 3703582	A	19721121	US 1970-30300	19700420
NL 7008619	A	19701229	NL 1970-8619	19700612
CA 957377	A1	19741105	CA 1970-85566	19700615
SE 374367	B	19750303	SE 1970-8266	19700615
GB 1271767	A	19720426	GB 1970-1271767	19700618
ES 380931	A1	19730916	ES 1970-380931	19700619
BE 752457	A	19701224	BE 1970-752457	19700624
FR 2053021	A5	19710416	FR 1970-23334	19700624
FR 2053021	B1	19740830		
ZA 7004320	A	19720223	ZA 1970-4320	19700624
DK 129045	B	19740812	DK 1970-3257	19700624

IT 31766-40-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 31766-40-2 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4-diol, 6-(p-fluorophenyl)- (8CI) (CA INDEX NAME)



L16 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1973:84347 Document No. 78:84347 3-Hydroxypyridopyrimidine-2,4(1H,3H)-diones. Tserng, Kou-Yi; Bauer, Ludwig (Med. Cent., Univ. Illinois, Chicago, IL, USA). Journal of Heterocyclic Chemistry, 9(6), 1433-5 (English) 1972. CODEN: JHTCAD. ISSN: 0022-152X.

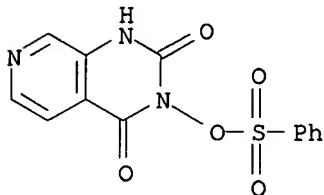
IT 40338-56-5P 40338-57-6P



RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

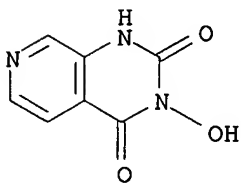
RN 40338-56-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[(phenylsulfonyl)oxy]- (9CI)  
(CA INDEX NAME)



RN 40338-57-6 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-hydroxy- (9CI) (CA INDEX NAME)



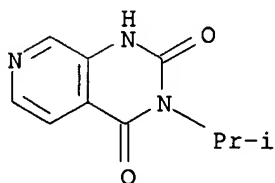
L16 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN  
1972:113254 Document No. 76:113254 Herbicidal 3-substituted  
pyridopyrimidinediones and lumazines. Jacobs, Richard L.  
(Sherwin-Williams Co.). U.S. US 3635973 19720118, 8 pp. (English).  
CODEN: USXXAM. APPLICATION: US 1969-878593 19691120.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3635973	A	19720118	US 1969-878593	19691120
IT	<b>36031-11-5P</b>				

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 36031-11-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-(1-methylethyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

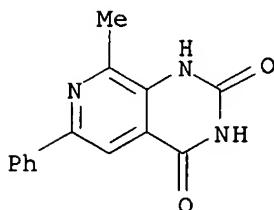
1975:31299 Document No. 82:31299 Syntheses of N-heterocyclic compounds.  
XXI. Syntheses of disubstituted aminopyridopyrimidine derivatives.  
Miyake, Akio; Oka, Yoshikazu; Yurugi, Shojiro (Takeda Chem. Ind., Ltd.,  
Osaka, Japan). Takeda Kenkyushoho, 33(3), 155-65 (Japanese) 1974. CODEN:  
TAKHAA. ISSN: 0371-5167.

IT 53639-09-1P 53693-93-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

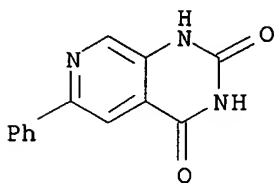
RN 53639-09-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 8-methyl-6-phenyl- (9CI) (CA  
INDEX NAME)



RN 53693-93-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6-phenyl- (9CI) (CA INDEX NAME)



L16 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

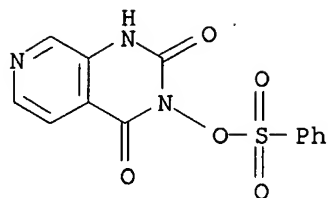
1974:552151 Document No. 81:152151 Degradative ring opening of pyrido- and  
pyrazino-3-benzenesulfonyloxuracils and their conversion to condensed  
pyrazolones and triazolones. Tserng, Kou-Yi; Bauer, Ludwig (Med. Cent.,  
Univ. Illinois, Chicago, IL, USA). Journal of Heterocyclic Chemistry,  
11(2), 163-6 (English) 1974. CODEN: JHTCAD. ISSN: 0022-152X.

IT 40338-56-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(ring cleavage of)

RN 40338-56-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[(phenylsulfonyl)oxy]- (9CI)  
(CA INDEX NAME)



L16 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1974:520689 Document No. 81:120689 Pyrido[3,4-d]pyrimidines. Yurugi, Shojiro; Miyake, Akio (Takeda Chemical Industries, Ltd.). Jpn. Kokai Tokkyo Koho JP 49036700 19740405 Showa, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1972-81993 19720816.

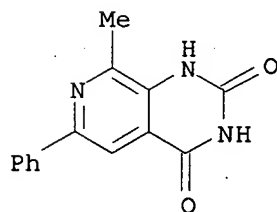
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 49036700	A2	19740405	JP 1972-81993	19720816

IT 53639-09-1 53693-93-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(chlorination of, by phosphorus oxychloride)

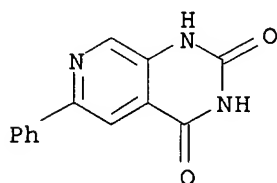
RN 53639-09-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 8-methyl-6-phenyl- (9CI) (CA INDEX NAME)



RN 53693-93-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6-phenyl- (9CI) (CA INDEX NAME)

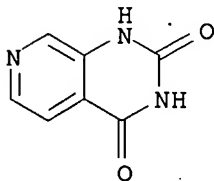


L16 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1975:547504 Document No. 83:147504 Heterocyclic acid anhydrides. Beckwith, Athelstan L. J. (Sherwin-Williams Co., USA). U.S. US 3887550 19750603, 6 pp. (English). CODEN: USXXAM. APPLICATION: US 1969-878552 19691120.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3887550	A	19750603	US 1969-878552	19691120

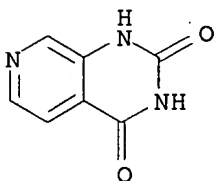
US 3947416 A 19760330 US 1975-548443 19750210  
US 3947442 A 19760330 US 1975-548442 19750210  
IT **21038-67-5P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 21038-67-5 CAPLUS  
CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN  
1976:433073 Document No. 85:33073 Azaisatoic anhydrides. Beckwith,  
Athelstan L. J. (Sherwin-Williams Co., USA). U.S. US 3947416 19760330, 6  
pp. Division of U.S. 3,887,550. (English). CODEN: USXXAM. APPLICATION:  
US 1975-548443 19750210.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3947416	A	19760330	US 1975-548443	19750210
	US 3887550	A	19750603	US 1969-878552	19691120

IT **21038-67-5P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 21038-67-5 CAPLUS  
CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)

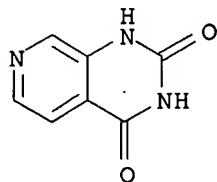


L16 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN  
1976:405683 Document No. 85:5683 Heterocyclic acid anhydrides and  
pyrimidinediones. Beckwith, Athelstan L. J. (Sherwin-Williams Co., USA).  
U.S. US 3947442 19760330, 6 pp. Division of U.S. 3,887,550. (English).  
CODEN: USXXAM. APPLICATION: US 1975-548442 19750210.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3947442	A	19760330	US 1975-548442	19750210
	US 3887550	A	19750603	US 1969-878552	19691120

IT **21038-67-5P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 21038-67-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione (8CI, 9CI) (CA INDEX NAME)



L16 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

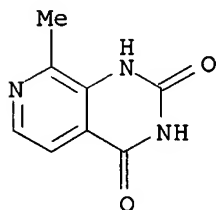
1992:214456 Document No. 116:214456 Synthesis of 8-methyl-1,2,3,4-tetrahydropyrido[3,4-d]pyrimidine-2,4-diones. Kujundzic, Nedjeljko; Gluncic, Berislav (Res. Inst., PLIVA, Zagreb, Yugoslavia). Croatica Chemica Acta, Volume Date 1992, 64(4), 599-606 (English) 1991. CODEN: CCACAA. ISSN: 0011-1643. OTHER SOURCES: CASREACT 116:214456.

IT 141097-71-4P 141097-77-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and hydrolysis of, with sodium hydroxide)

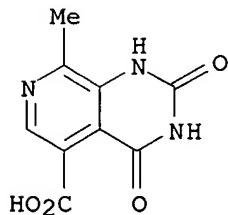
RN 141097-71-4 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 8-methyl- (9CI) (CA INDEX NAME)



RN 141097-77-0 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



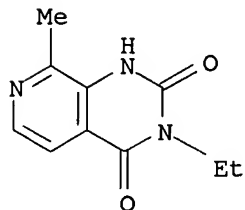
IT 141097-72-5P 141097-73-6P 141097-74-7P  
141097-75-8P 141097-76-9P 141097-78-1P  
141097-82-7P 141097-84-9P 141097-85-0P  
141097-86-1P 141097-87-2P 141097-88-3P  
141123-67-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

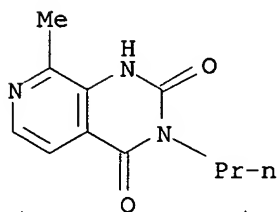
RN 141097-72-5 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-ethyl-8-methyl- (9CI) (CA INDEX NAME)



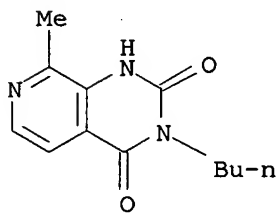
RN 141097-73-6 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 8-methyl-3-propyl- (9CI) (CA INDEX NAME)



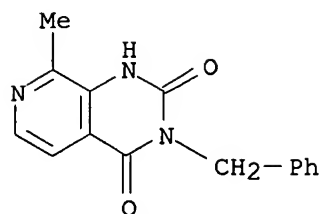
RN 141097-74-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-butyl-8-methyl- (9CI) (CA INDEX NAME)



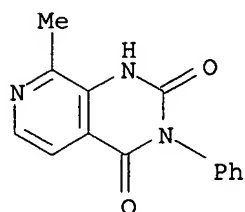
RN 141097-75-8 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 8-methyl-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



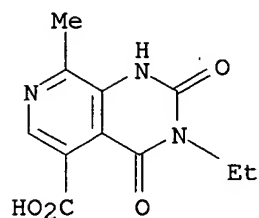
RN 141097-76-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 8-methyl-3-phenyl- (9CI) (CA INDEX NAME)



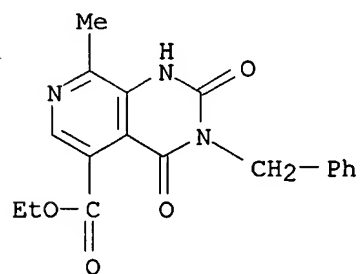
RN 141097-78-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 3-ethyl-1,2,3,4-tetrahydro-8-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



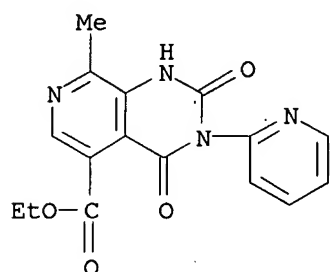
RN 141097-82-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2,4-dioxo-3-(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)



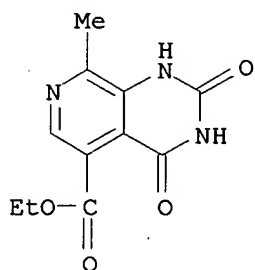
RN 141097-84-9 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2,4-dioxo-3-(2-pyridinyl)-, ethyl ester (9CI) (CA INDEX NAME)



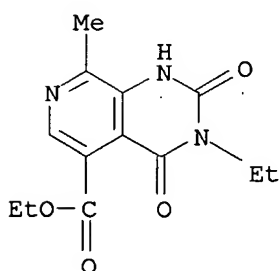
RN 141097-85-0 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 141097-86-1 CAPLUS

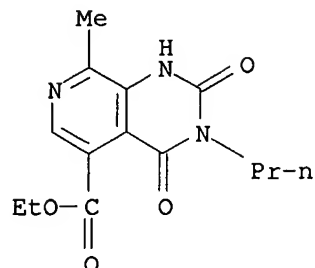
CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 3-ethyl-1,2,3,4-tetrahydro-8-methyl-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 141097-87-2 CAPLUS

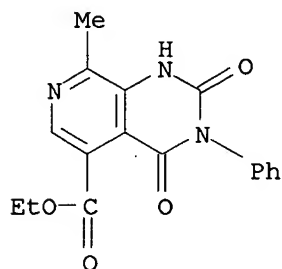
CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2,4-dioxo-3-propyl-, ethyl ester (9CI) (CA INDEX NAME)





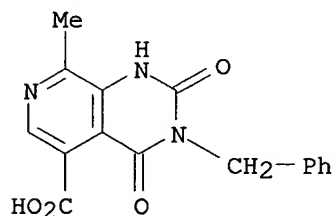
RN 141097-88-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2,4-dioxo-3-phenyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 141123-67-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-5-carboxylic acid, 1,2,3,4-tetrahydro-8-methyl-2-oxo-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

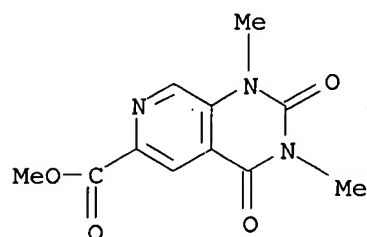
1994:270302 Document No. 120:270302 Novel synthesis of pyrido[3,4-d]pyrimidines, pyrido[2,3-d]pyrimidines, and quinazolines via palladium-catalyzed oxidative coupling. Hirota, Kosaku; Kuki, Hideki; Maki, Yoshifumi (Gifu Pharm. Univ., Gifu, 502, Japan). Heterocycles, 37(1), 563-70 (English) 1994. CODEN: HTCYAM. ISSN: 0385-5414. OTHER SOURCES: CASREACT 120:270302.

IT 154470-79-8P 154470-80-1P 154470-81-2P  
154470-82-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

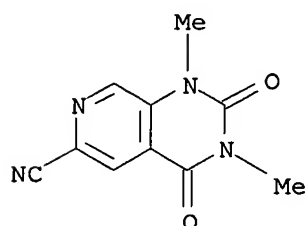
RN 154470-79-8 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carboxylic acid, 1,2,3,4-tetrahydro-1,3-dimethyl-2,4-dioxo-, methyl ester (9CI) (CA INDEX NAME)



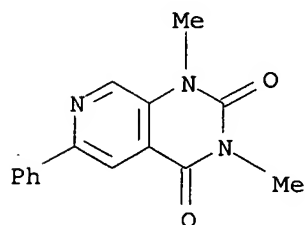
RN 154470-80-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-6-carbonitrile, 1,2,3,4-tetrahydro-1,3-dimethyl-2,4-dioxo- (9CI) (CA INDEX NAME)



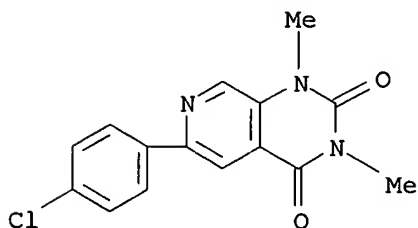
RN 154470-81-2 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 1,3-dimethyl-6-phenyl- (9CI) (CA INDEX NAME)



RN 154470-82-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 6-(4-chlorophenyl)-1,3-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1996:580284 Document No. 125:247845 Preparation of heterocyclyl-substituted benz[e]isoindoles as  $\alpha$ 1 adrenergic antagonists. Meyer, Michael D.; Altenbach, Robert J.; Basha, Fatima Z.; Carroll, William A.; Drizin, Irene; Kerwin, James F., Jr.; Lebold, Suzanne A.; Lee, Edmund L.; Pratt, John K.; et al. (Abbott Laboratories, USA). PCT Int. Appl. WO 9622991 A1 19960801, 123 pp. DESIGNATED STATES: W: AU, CA, JP, KR, MX; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US178 19960111. PRIORITY: US 1995-379823 19950127; US 1995-465476 19950605.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9622991	A1	19960801	WO 1996-US178	19960111
W: AU, CA, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5521181	A	19960528	US 1995-379823	19950127
US 5792767	A	19980811	US 1995-465476	19950605
AU 9647473	A1	19960814	AU 1996-47473	19960111
AU 694611	B2	19980723		
EP 805812	A1	19971112	EP 1996-903364	19960111
EP 805812	B1	20010613		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
JP 11501616	T2	19990209	JP 1996-522872	19960111

IT 179114-55-7P 181434-18-4P

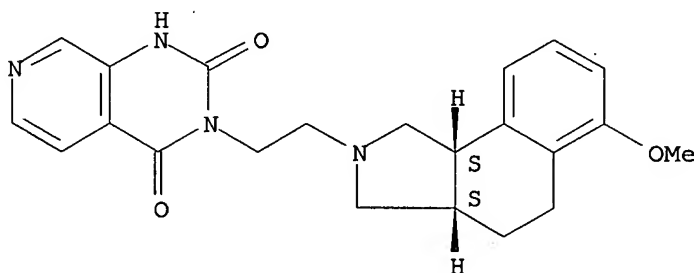
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclyl-substituted benz[e]isoindoles as  $\alpha$ 1 adrenergic antagonists)

RN 179114-55-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

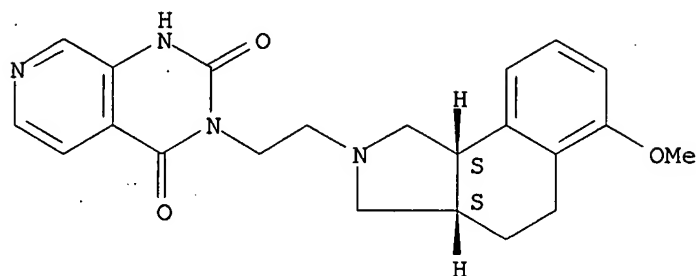


● HCl

RN 181434-18-4 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L16 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

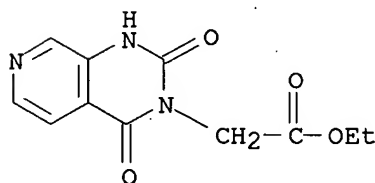
1996:529557 Document No. 125:168007 Preparation of pyridopyrimidine derivatives as aldose-reductase inhibitors. Sato, Hiroko; Sugizaki, Myoshi; Myaoka, Shozo (Terumo Corp, Japan). Jpn. Kokai Tokkyo Koho JP 08143568 A2 19960604 Heisei, 24 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-287626 19941122.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08143568	A2	19960604	JP 1994-287626	19941122
IT	180479-01-0P	180479-02-1P	180479-03-2P		
	180479-04-3P	180479-05-4P	180479-07-6P		
	180479-08-7P	180479-09-8P	180479-10-1P		
	180479-11-2P				

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) (synthesis of aldose-reductase inhibiting pyridopyrimidine derivs.)

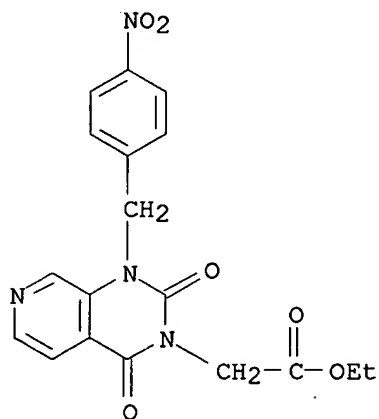
RN 180479-01-0 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-acetic acid, 1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



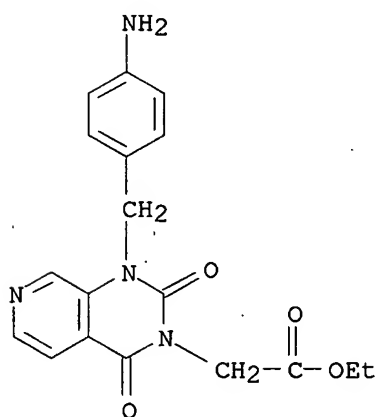
RN 180479-02-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-acetic acid, 1,4-dihydro-1-[(4-nitrophenyl)methyl]-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



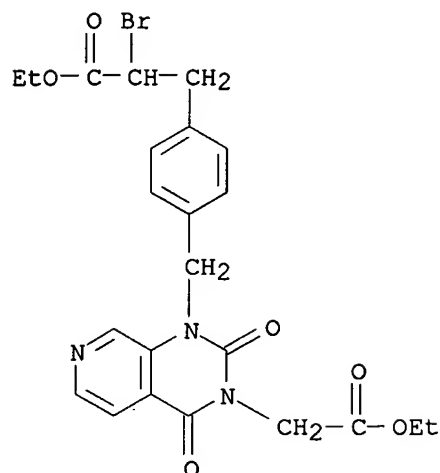
RN 180479-03-2 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-acetic acid, 1-[(4-aminophenyl)methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



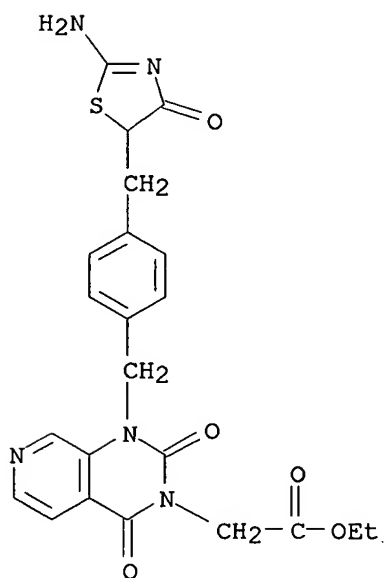
RN 180479-04-3 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-acetic acid, 1-[[4-(2-bromo-3-ethoxy-3-oxopropyl)phenyl]methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



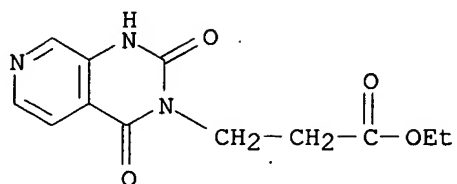
RN 180479-05-4 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-acetic acid, 1-[[4-[(2-amino-4,5-dihydro-4-oxo-5-thiazolyl)methyl]phenyl]methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



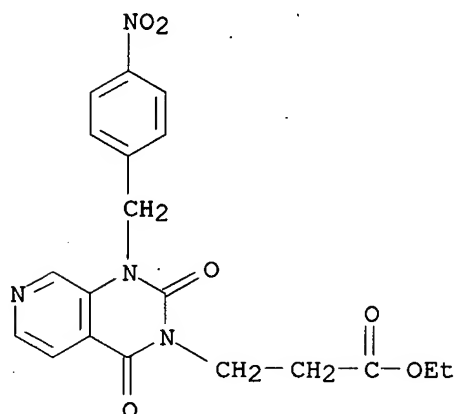
RN 180479-07-6 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-propanoic acid, 1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



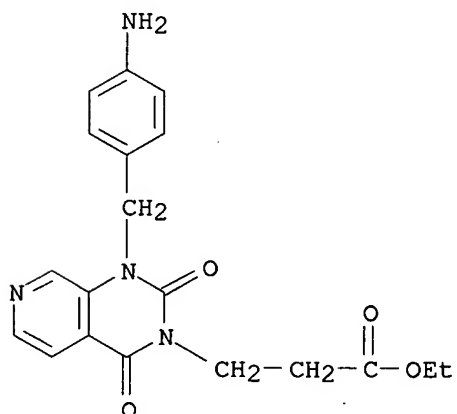
RN 180479-08-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-propanoic acid, 1,4-dihydro-1-[(4-nitrophenyl)methyl]-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



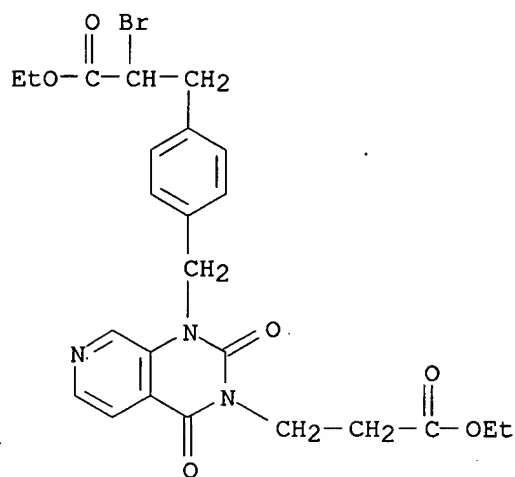
RN 180479-09-8 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-propanoic acid, 1-[(4-aminophenyl)methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



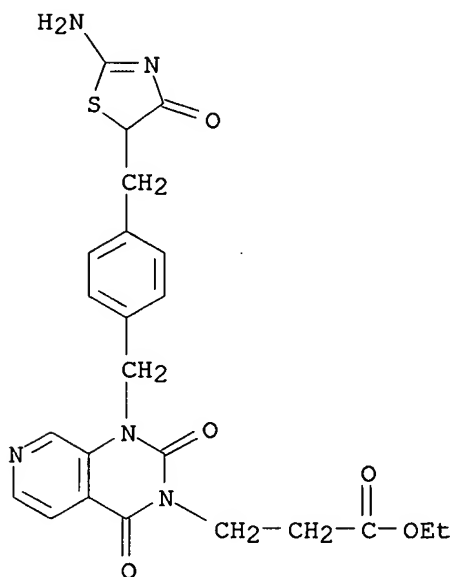
RN 180479-10-1 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-propanoic acid, 1-[[4-(2-bromo-3-ethoxy-3-oxopropyl)phenyl]methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 180479-11-2 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-propanoic acid, 1-[[4-[(2-amino-4,5-dihydro-4-oxo-5-thiazolyl)methyl]phenyl]methyl]-1,4-dihydro-2,4-dioxo-, ethyl ester (9CI) (CA INDEX NAME)



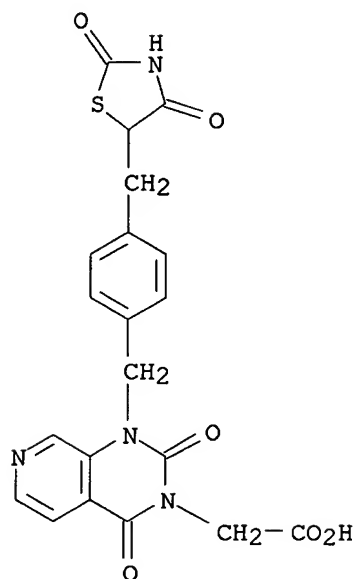
IT 180478-72-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(synthesis of aldose-reductase inhibiting pyridopyrimidine derivs.)

RN 180478-72-2 CAPLUS

CN Pyrido[3,4-d]pyrimidine-3(2H)-acetic acid, 1-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenyl]methyl]-1,4-dihydro-2,4-dioxo- (9CI) (CA INDEX NAME)





L16 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1996:380209 Document No. 125:114680 Bicyclic substituted

hexahydrobenz[e]isoindole  $\alpha$ -1 adrenergic antagonists. Meyer, Michael D.; Altenbach, Robert J.; Carroll, William A.; Drizin, Irene; Lebold, Suzanne A.; Lee, Edmund L.; Sippy, Kevin B.; Tietje, Karin R.; Yamamoto, Diane M.; Kerwin, James F., Jr. (Abbott Laboratories, USA). U.S. US 5521181 A 19960528, 31 pp. (English). CODEN: USXXAM.

APPLICATION: US 1995-379823 19950127.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5521181	A	19960528	US 1995-379823	19950127
	US 5792767	A	19980811	US 1995-465476	19950605
	CA 2210966	AA	19960801	CA 1996-2210966	19960111
	WO 9622991	A1	19960801	WO 1996-US178	19960111
	W: AU, CA, JP, KR, MX				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9647473	A1	19960814	AU 1996-47473	19960111
	AU 694611	B2	19980723		
	EP 805812	A1	19971112	EP 1996-903364	19960111
	EP 805812	B1	20010613		
IT	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
	JP 11501616	T2	19990209	JP 1996-522872	19960111
	ES 2159721	T3	20011016	ES 1996-903364	19960111

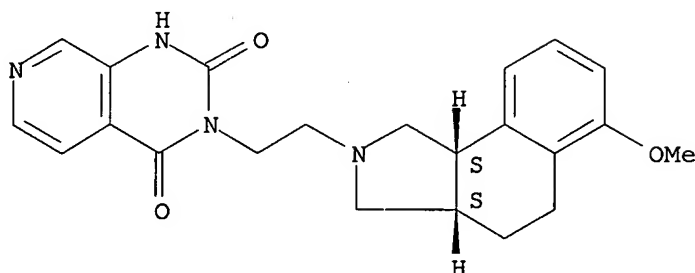
IT 179114-55-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation as adrenergic antagonists)

RN 179114-55-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● HCl

L16 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

1998:542760 Document No. 129:161567 Preparation of bicyclic-substituted hexahydrobenz[e]isoindoles as  $\alpha 1$  adrenergic antagonists. Meyer, Michael D.; Altenbach, Robert J.; Basha, Fatima Z.; Carroll, William A.; Drizin, Irene; Kerwin, James F., Jr.; Lebold, Suzanne A.; Lee, Edmund L.; Pratt, John K.; Sippy, Kevin B.; Tietje, Karin R.; Yamamoto, Diane M. (Abbott Laboratories, USA). U.S. US 5792767 A 19980811, 42 pp., Cont.-in-part of U. S. 5,521,181. (English). CODEN: USXXAM. APPLICATION: US 1995-465476 19950605. PRIORITY: US 1995-379823 19950127.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5792767	A	19980811	US 1995-465476	19950605
US 5521181	A	19960528	US 1995-379823	19950127
CA 2210966	AA	19960801	CA 1996-2210966	19960111
WO 9622991	A1	19960801	WO 1996-US178	19960111
W: AU, CA, JP, KR, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9647473	A1	19960814	AU 1996-47473	19960111
AU 694611	B2	19980723		
EP 805812	A1	19971112	EP 1996-903364	19960111
EP 805812	B1	20010613		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
JP 11501616	T2	19990209	JP 1996-522872	19960111
ES 2159721	T3	20011016	ES 1996-903364	19960111

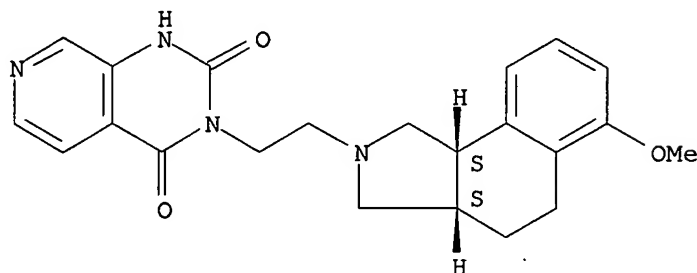
IT 179114-55-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of bicyclic substituted hexahydrobenz[e]isoindoles as  $\alpha 1$ -adrenergic antagonists)

RN 179114-55-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● HCl

L16 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

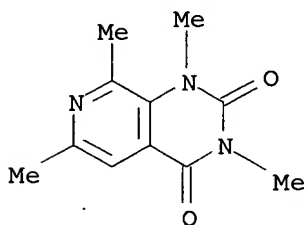
2001:1561 Document No. 134:279839 Volatile flavor and off-flavour components in black tilapia (*O-mossambica*) cultured in ex-tin mines. Izzah, A. Nurul; Ahmad, F. B. H.; Jamilah, B.; Salmah, Y. (Environmental Health Research Center, Institute for Medical Research, Kuala Lumpur, 50588, Malay.). Research Journal of Chemistry and Environment, 4(3), 67-72 (English) 2000. CODEN: RJCEF7. ISSN: 0972-0626. Publisher: Research Journal of Chemistry and Environment.

IT 22389-81-7

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
(in black tilapia cultured in ex-tin mines)

RN 22389-81-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 1,3,6,8-tetramethyl- (8CI, 9CI)  
(CA INDEX NAME)



L16 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2003 ACS on STN

2001:334737 Document No. 135:107300 Structure-Activity Studies for a Novel Series of Bicyclic Substituted Hexahydrobenz[e]isoindole  $\alpha$ 1A Adrenoceptor Antagonists as Potential Agents for the Symptomatic Treatment of Benign Prostatic Hyperplasia. Meyer, Michael D.; Altenbach, Robert J.; Bai, Hao; Basha, Fatima Z.; Carroll, William A.; Kerwin, James F., Jr.; Lebold, Suzanne A.; Lee, Edmund; Pratt, John K.; Sippy, Kevin B.; Tietje, Karin; Wendt, Michael D.; Brune, Michael E.; Buckner, Steven A.; Hancock, Arthur A.; Drizin, Irene (Neurological and Urological Diseases Research Pharmaceutical Products Division, Abbott Laboratories, Abbott Park, IL, 60064, USA). Journal of Medicinal Chemistry, 44(12), 1971-1985 (English) 2001. CODEN: JMCMAR. ISSN: 0022-2623. OTHER SOURCES: CASREACT

135:107300. Publisher: American Chemical Society.

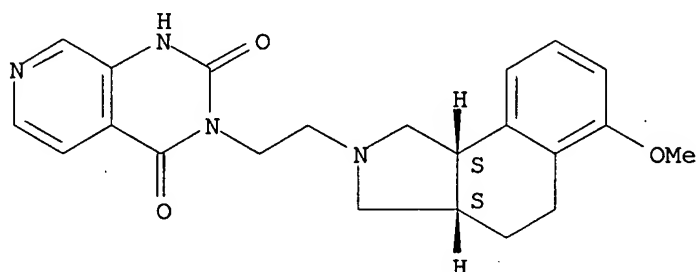
IT 181434-18-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and structure-activity studies of bicyclic-substituted hexahydrobenz[e]isoindole  $\alpha$ 1A adrenoceptor antagonists)

RN 181434-18-4 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



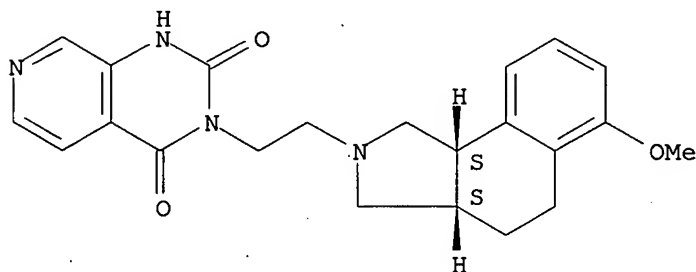
IT 350228-56-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation and structure-activity studies of bicyclic-substituted hexahydrobenz[e]isoindole  $\alpha$ 1A adrenoceptor antagonists)

RN 350228-56-7 CAPLUS

CN Pyrido[3,4-d]pyrimidine-2,4(1H,3H)-dione, 3-[2-[(3aR,9bR)-1,3,3a,4,5,9b-hexahydro-6-methoxy-2H-benz[e]isoindol-2-yl]ethyl]-, dihydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● 2 HCl

=> logoff

10/075,069

Thomas McKenzie

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:.

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

118.19

345.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-0.62

STN INTERNATIONAL LOGOFF AT 09:52:52 ON 23 SEP 2003